



Pharmaceuticals from Households: A Return Mechanism (PH:ARM)

A Washington State Pilot Program to Return Pharmaceuticals for Proper Disposal



Why Collect Unwanted Pharmaceuticals?

WATER POLLUTION: Pharmaceuticals are detectable at low but environmentally significant levels in the streams, lakes and other tributary surface waters that flow in Puget Sound. Scientists are beginning to link pharmaceutical contaminants in surface water to biological effects on the endocrine systems of hundreds of freshwater, estuarine and marine species.

LONG TERM EXPOSURE: The detection of pharmaceutical compounds stems from a variety of sources, but one significant contributor is the direct disposal of waste pharmaceuticals to the sewer or the landfill.

POISONING: Medications account for the most common poison exposure category in the US. The massive number of medications available presents a substantial accidental poisoning risk if they are not properly stored or disposed.

DIVERSION TO OTHER USERS: Unsecured disposal to the garbage or using improper facilities increases drug abuse. For children, access to controlled prescription drugs for the purpose of diversion can be as close as a household medicine cabinet.



What is the Solution?

The concept is simple: Any and all unwanted pharmaceuticals from households could be taken back to any pharmacy. This would include pharmaceutical pills, capsules and tablets, vitamins, medicated ointments, cough syrups, antibiotics, and inhalers—which are either over-the-counter, prescribed or controlled substances.



Two models will be piloted. A **Clinical and Retail Pharmacy Take-Back Program** will serve dispersed households such as residential users, school districts, childcare facilities, hospice patient's families, and hotels. A **Nursing Home Take-Back Program** will serve managed nursing home residents.

Both models will allow patients to deposit unwanted medications into secure containers for proper disposal. These secure containers will be securely tracked from collection to disposal, but individual medications will not be inventoried. Final disposal will occur at an permitted hazardous waste incinerator meeting environmental, destruction, and safety requirements.

What will the PH:ARM Pilot Accomplish?

Through the generous support of the Russell Family Foundation, the Public Information and Education fund (Puget Sound Action Team), Snohomish County Solid Waste Management Division, Seattle Public Utilities, Group Health Cooperative, and Bartell Drug Company, the PH:ARM Pilot will collect unwanted pharmaceuticals from households in 2006-2008 at 100 Puget Sound locations. The objectives of the PH:ARM pilot are to:

- Provide education and outreach** to encourage customers and nursing homes to use the pilot program;
- Coordinate with other environmental organizations** working to protect Puget Sound;
- Interpret and analyze regulations** to reduce barriers;
- Coordinate with other health care information networks** to support the pilot's success;
- Promote and investigate options for eliminating waste in prescriptions, dosages, and packaging;**
- Develop measurement and evaluation protocols** by which success can be measured;
- Develop and implement surveys** to gauge patient satisfaction and participation in the program;
- Monitor results** at final disposal site and thoroughly research end-disposal alternatives;
- Estimate the total volume of unwanted medications** to collect statewide;
- Disseminate information nationally** to share lessons learned;
- Develop a product stewardship strategy** for sustainable financing; and
- Expand pilot to regional healthcare partners** throughout Washington State.



What about Unwanted Prescription Controlled Substances? The Controlled Substances Act (CSA), enforced by the Drug Enforcement Administration does not allow the return of controlled substances (a list of scheduled drugs) from end-users to anyone other than a law enforcement officer. It is anticipated that any collection program of pharmaceuticals would receive some controlled substances. Excluding controlled drugs is impractical, unfeasible, and simply increases risks to public safety. The Pilot Implementation Team is currently asking the DEA for a licensure (or exemption from the CSA) for conducting a tightly-monitored pilot collection program for all types of legal pharmaceuticals.

The PH:ARM Team

•Interagency Resource for Achieving Cooperation (IRAC) •Local Hazardous Waste Management Program in King County •Snohomish County Solid Waste Management Division •Public Health-Seattle & King County •Northwest Product Stewardship Council •Washington Citizens for Resource Conservation •Pacific NW Pollution Prevention Resource Center •Washington Department of Social and Health Services- Aging and Disability Administration Services •Washington State Department of Ecology and advised by the •Washington Board of Pharmacy

FOR MORE INFORMATION, PLEASE CONTACT EMMA JOHNSON, PROJECT FACILITATOR, WASHINGTON STATE DEPARTMENT OF ECOLOGY 425-649-7266 EJOH461@ECY.WA.GOV